

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

TO: G. W. Cunningham, Technical Director
FROM: T. Dwyer and H. Waugh, Pantex Site Representatives
SUBJECT: Pantex Plant Activity Report for Week Ending June 27, 1997

DNFSB Activity Summary: Timothy Dwyer and Harry Waugh were on site all week.

Lightning Protection: SNL (Kimball Merewether) has issued a report on lightning protection of the W79 DMSO process that raises generic questions for the site, other facilities in the complex, and DoD. The report defines 10 kV and 900 A as the threat environment *inside all bays and cells*. SNL "would consider unsafe any process or operation that was designed to meet less stringent guidelines." This threat environment is the minimum, given that facility rebar is bonded sufficiently (ceiling, walls, floor, and all penetrations) that it can be treated as a Faraday cage. Sitewide, two compensatory measures have now been implemented during lightning warnings: termination of hoisting; and finishing/not initiating transportation of assemblies not protected by metal containers. Hoist cable conductor breaks (kevlar) and work stand isolations (including utility lines) are being explored. At issue is the fact that simply *terminating* operations on a potentially vulnerable assembly in a work stand does not decrease its vulnerability.

Authorization Basis (AB) Inadequacies: A joint AAO/M&H investigation of root causes of the June 6th B61-3 event found generic problems with application of the *Nuclear Explosive Safety Master Study of General Use Processing Facilities at the USDOE Pantex Plant*. Of particular concern, neither AAO nor M&H could immediately determine whether current operating practices and conditions were within the boundaries of the facility AB. Ultimately, it appears that they will find themselves within the AB, but this issue highlights inadequacies in existing AB documentation and in AB document control. M&H is initiating an immediate review of eleven additional satellite facilities, where similar AB deficiencies are suspected to exist.

B61-3 Recovery: Disassembly of the B61-3 unit involved in the June 6th event remains at issue. SNL has finally agreed to use of the LINAC under three procedural constraints, which are being written into the SIER. The LINAC shot could take place early next week, although no information gained from the LINAC shot is expected to change the disassembly procedure.

Off-Site Health Hazard Pathways: A study commissioned by the U.S. Public Health Service, Agency for Toxic Substances and Disease Registry, was released to the Pantex Plant Citizens Advisory Board for technical comment this week. The study concludes that there are no completed or potential environmental pathways of health significance.

W79 Single Integrated Internal Review (SIIR): The W79 SIIR team closeout meeting was held June 26th. The team reported 24 prestart findings, in line with those indicated last week by Board staff in weekly letters/trip reports. A second SIIR is planned, date TBD.

Attachment

Upcoming Pantex Events:

[in progress] -- M&H AT-400A ORR

July 1 -- W69 NESS briefing to Twining (@ AL) - Ryder only

July 7 -- W87 SEP starts

July 14 [tentative] -- DOE AT-400A ORR starts [if M&H ORR done]

July 9 -- DOE/M&H Quarterly Production Meeting

July 28-August 8 -- W56 WR Dismantlement Demo for HATT

Week of August 11 -- Major Sitewide Emergency Exercise

August 11-15 -- W56 Project Team and SE Validation

August 13 -- W78 SS-21 Milestone I meeting

August 18 -- W56 WPRR starts